

REMARKS

This Amendment is filed in response to the Office Action dated July 3, 2006. Applicants first note with appreciation the Examiner's thorough examination of the application. In response to the Office Action, Applicant has amended various claims to clarify the claimed invention. Applicants respectfully submit that the claims are in condition for allowance and respectfully request reconsideration and allowance of the application in light of the following remarks.

I. The Claims Are In Proper Form

The Office Action, on pages 4-7 thereof, raises several §112 rejections to the claims. Applicants have amended the claims to address some of the issues raised. For example, amendments herein provide that "product availability information" is consistently identified as such throughout the claims. Amendments herein clarify that, where updating of the product availability information occurs according to start dates, updating occurs more often for start dates occurring sooner in time. Amendments herein clarify that updating information relates to updating the product availability information stored in the storage device. Furthermore, the Office Action, on page 7 thereof, raises an issue regarding Claims 65, 73, and 80 and whether a "start date can be less than" a length of use. Amendments herein clarify that requested lengths of use are divided into at least two selected lengths of use, and that each selected length of use has an associated start date.

Applicants would like to comment further, however, concerning several of the rejections raised in the Office Action. With regard to Claims 1, 20, 31, 41, 47, 50, 65, 73 and 80, the Office Action (page 4) argues that these claims are vague and indefinite as with regard to the use of a product. Applicants respectfully submit that these claims, as amended herein, include in their preambles language clarifying that a product has one or more associated different start dates indicating when a user may initiate use of the product. Such language indicates that the product is available for use upon associated start dates, without any indication as to whether the product will be used. Even if the preambles were to indicate that a product was going to be used, the bodies of the claims need not recite actual use of the product. U.S. Patent law does not require that a patentee include all elements of the invention in the broadest claim. Instead, the patentee

need only include sufficient elements to define over the prior art.

In a related issue, the Office Action (pages 5 and 6) raises several §112 rejections to claims that include the words “may” and “can.” These words relate to the availabilities of products for potential use without indications as to whether the products are actually used. For example, Claim 8 recites, among other things: “the product can be used beginning on a particular start date and may be used for different lengths of use,” without indicating whether the product is used. In this example, the recitation after “can” is a part of the claim limitation in that the product is available to be used beginning on a particular start date. The recitation after “may” is a part of the claim limitation in that the product is available to be used for different lengths of time.

With regard to Claims 1, 20, 31, 41, 47, 50, the Office Action (page 5) argues that these claims are vague and indefinite as with regard to start dates occurring sooner and later in time. Applicants respectfully submit that the start dates recited in these claims relate to calendar dates. Any calendar date can be identified as occurring earlier or later in time relative to any other calendar date. Thus, these claims are clear and definite with regard to this issue.

II. The Claims Recite Patentable Subject Matter

The Office Action (page 7) raises a §101 rejection toward all of the pending claims, wherein the claims are deemed to be drawn toward non-statutory subject matter. This issue raised by the Office Action is improper. The pending claims all relate to updating stored product availability information. The *State Street* decision merely states that there must be a tangible, concrete result. In *State Street*, it was enough that the system calculated values held in memory. *State Street* held that it was enough that values were created that could be later used for other calculations. According to the claimed inventions, product availability information stored in a storage device is updated. The storage of updated information is useful, for example, for later dissemination of the information to users who make requests. That many of these claims do not have explicit recitations toward disseminating information to users does not affect their patentable utility. Incidentally, independent Claims 86 and 88, and therefore claims 87 and 89 that depend respectively therefrom, do explicitly recite that information is provided to a user.

III. Independent Claims 1, 20, 31, 41, 47, and 50 Are Patentable

The Office Action, on page 8 thereof, rejects independent Claims 1, 20, 31, 41, 47, and 50, along with various other claims depending therefrom, as unpatentable under §103 over Fay et al. (U.S. Patent Application Publication US 2003/0187851A1) in view of Smith et al. (U.S. Patent No. 6,742,033). These rejected claims relate to, among other things, the updating of stored information more often for start dates that occur sooner in time than for later occurring start dates.

The Office Action acknowledges that updating of product availability information more often for start dates that occur sooner in time more often than for later start dates is not disclosed by the Fay reference. Applicants concur and further comment that the Fay reference describes a system wherein subscribers first request information regarding airline flights, the information is collected and cached, and the cached information can be retrieved within a shelf-life period, after which period the information is deleted. For example, paragraphs [0023] and [0055] of Fay describe that trips are deleted from the cache database after the shelf-life has expired. Paragraphs [0027] and [0063] describe that a real-time request is sent to an airline server when no trip matching a received availability request is found in the cache database. Only upon receipt of a real-time request is availability information cached in the Fay reference, wherein updating cached information does not occur per se.

Applicants further submit that the Smith reference also does not teach or suggest updating the cache and thus, does not fill in the missing teachings of the Fey reference. The Smith reference describes a system wherein information is automatically cached just prior to usage. Updating the cache does not relate well to the Smith reference because the information cached in Smith is intended for almost immediate use. The Smith reference nowhere teaches or suggests updating the cache data, much less updating the cache data more often for start dates that occur sooner in time than for later occurring start dates. At best, the Smith reference discloses updating a historical usage pattern of the user, as described in lines 6-13 of column 7, and in lines 2-4 of column 8, so that the system can predict the changing preferences of a user. Such updating in Smith, however, does not relate to the updating of product availability

information stored in a storage device in any fashion regarding consideration toward the start date of availability of a product.

Thus, the Fay and Smith references fail to disclose or render obvious independent Claims 1, 20, 31, 41, 47, and 50, which relate to the updating of stored information more often for start dates that occur sooner in time than for later occurring start dates. As such, Applicants respectfully submit these independent claims, as well as the claims that depend therefrom, are patentable over the cited references.

IV. Independent Claims 65, 73, and 80 Are Patentable

The Office Action, on page 17 thereof, indicates that Claims 65-85 would be allowable if the corresponding §112 rejections are overcome. Amendments and remarks above address these §112 rejections. Regarding amendments to these claims: “product availability information” is now consistently recited as such; and, amendments herein clarify that requested lengths of use are divided into selected lengths of use, each of which has an associated start date. Remarks above address the use of the term “may” in these claims. As such, Applicants respectfully submit that independent Claims 65, 73, and 80, as well as the claims that depend therefrom, are allowable with regard to patentability over prior art and with regard to proper form and the §112 rejections.

V. Independent Claims 86, and 88 Are Patentable

The Office Action, on page 15-16 thereof, rejects independent Claims 86, and 88, along with claims 87 and 89 depending respectively therefrom, as unpatentable under §103 over Fay et al. (U.S. Patent Application Publication US 2003/0187851A1) in view of Megiddo et al. (U.S. Patent Application Publication US 2004/0098541A1). These claims are directed to, among other things, determining a hit ratio for a product source and increasing product availability information updates for the product source when the hit ratio is below a threshold.

The Office Action, on page 16 thereof, acknowledges that the hit ratio determination of these claims, and the updating with consideration toward the hit ratio is not disclosed by the Fay reference. Applicants concur and further comment that data is cached in the Fay reference only

in direct response to user requests. Paragraphs [0027] and [0063] of Fay describe that a real-time request is sent to an airline server when no trip matching a received availability request is found in the cache database. Only upon receipt of a real-time request is availability information cached in the Fay reference, wherein updating cached information does not occur per se. The Megiddo reference describes a system for implementing an adaptive replacement cache policy. A hit ratio is defined, in paragraph [0046] of Megiddo, as the frequency at which a page is found in a cache as opposed to finding the page in an auxiliary memory. This hit ratio is used in Megiddo as a measure of success of a replacement cache policy. It is mere chance that the Megiddo reference utilizes the same term for this measure as the “hit ratio” of the current claims. The “hit ratio” of Megiddo is not compared to a threshold to determine whether cached information associated with a particular product source is updated.

Thus, the Fay and Megiddo references fail to disclose or render obvious independent Claims 86, and 88, which relate to determining a hit ratio for a product source and increasing product availability information updates for the product source when the hit ratio is below a threshold. As such, Applicants respectfully submit that independent Claims 86, and 88, as well as Claims 87, and 89 that depend respectively therefrom, are patentable over the cited references.

VI. Independent Claim 90 Is Patentable

Independent Claim 90 recites, among other things, “updating the product availability information stored in the storage device according to seasonal information, wherein the seasonal information comprises a range of dates, wherein updating the product availability information stored in the storage device comprises updating more often for start dates within the date range defined by the seasonal information than for start dates not within the date range defined by the seasonal information.” Support for this claim is found at least at paragraphs [0016]-[0017] and [0126]-[0128] of the published version of the patent application. Applicants respectfully submit that updating a cache based on seasonal information is nowhere taught or suggested by the cited references.

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Reply to Office Action of July 3, 2006

CONCLUSION

In light of the amended and added claims and the remarks above, Applicants respectfully submit that the application is in condition for allowance and respectfully request that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' counsel to discuss any outstanding issues so as to expedite the application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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